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Economic and managerial considerations in establishing and operating a commercial FM broadcasting station

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ECONOMIC AND MANAGERIAL CONSIDERATIONS IN ESTABLISHING AND OPERATING A COMMERCIAL FM BROADCASTING STATION

By

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CHAPTER I

INTRODUCTION

Background

The radio broadcasting industry has been characterized by growing profit levels not withstanding a high degree of competitiveness among firms. The factor of growing profit levels has attracted several new entries into the industry each year. The predominant growth was the number of AM (Amplitude Modulation broadcasting) stations. By 1964 this predominance of AM growth had reached the point where the Federal Communications Commission was forced to publish new rules and regulations governing the number of new AM stations authorized each year. These rules diverted the interest in commercial radio broadcasting into a lesser utilized broadcasting medium--FM (Frequency Modulation) radio.

Scope and Purpose

Since 1964 there has been a steady increase both in the number of FM stations and the levels of revenue received within the FM broadcasting industry. These factors contributed to the need for a study of the FM broadcasting industry, its growth record, and its potential as an investment in the form of establishing and operating a new commercial FM broadcasting station.

This paper will attempt to provide an entrepreneur with a background of the radio broadcasting industry and specifically, the area of FM station operations. Selected sets of information on managerial and economic factors of such a station will be the main topics treated in this study. The final section of the paper will contain an outline which an entrepreneur can use to investigate an FM station as an investment project. The essential factors necessary for determining a particular community's need, and ability to support, a new commercial FM broadcasting station, have been analyzed.

CHAPTER II

THE BROADCASTING INDUSTRY

General Review of the Industry

The radio broadcasting industry has expanded rapidly since its beginning in 1920. The industry had only 31 commercial broadcasting stations in operation at the end of 1921.[1] By 1972, over 6,000 commercial stations had received licenses from the Federal Communications Commission (FCC).[2] It is this factor, the steady increase in number of commercial broadcasting stations, that most vividly illustrates how the industry has expanded to provide one of the most far reaching means of mass communication to the American public.

The period 1960 to 1972 showed the most significant growth in the number of commercial broadcasting stations. FCC statistics showed that a total of 4,493 Amplitude Modulation (AM) and Frequency Modulation (FM) commercial broadcasting stations were licensed for operations in 1960.[3] In 1972, the total number of licensed commercial broadcasting stations had increased 53 percent to a total of 6,890.[4]

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[1]National Association of Broadcasters, Dimensions of Radio, (Washington, D.C.: National Association of Broadcasters, 1974), p. 1.

[2]Ibid.

[3]Ibid.

[4]Ibid.

Table 1 below illustrates the growth of commercial broadcasting stations from 1960 to 1972.

TABLE 1

GROWTH OF COMMERCIAL BROADCASTING STATIONS

Year	Number of Stations		
	AM Stations	FM Stations	Total
1960	3,581	912	4,493
1965	4,097	1,565	5,662
1966	4,153	1,744	5,897
1967	4,224	1,951	6,175
1968	4,289	2,094	6,383
1969	4,321	2,181	6,502
1970	4,370	2,260	6,630
1971	4,396	2,368	6,764
1972	4,422	2,468	6,890

SOURCE: National Association of Broadcasters, Dimensions of Radio, (Washington, D.C.: National Association of Broadcasters, 1974).

Until approximately 1960, the predominant growth in commercial broadcasting stations was in the AM segment of the industry. FM broadcasting was still in its infancy. FM broadcasting was authorized by the Federal Communications Commission on January 1, 1941.[5] The years immediately following the FCC authorization did not show any appreciable

[5]National Association of Broadcasters, FM A Look At Frequency Modulation Radio, (Washington, D.C.: National Association of Broadcasters, 1969), p. 1.

movement toward FM broadcasting by members of the industry. The main reason for its slow start was that FM made its debut about the same time as another means of mass communication--television. It was not until the mid 1960 to 1972 time period that FM broadcasting began to come into its own. The American public had become accustomed to television and was beginning to look for ways to obtain entertainment while performing business operations, household chores, or just relaxing. Their attention was turned back toward radio. AM radio broadcasting had become oriented toward contemporary and rock music programming interspersed with a myriad of commercial advertising. FM broadcasting stations, on the other hand, offered a programming format of continuous music with only a few interruptions for news, weather, and local events. The public then became oriented to a new style of listening pleasure and the FM segment of the radio broadcasting industry began its rapid expansion. Since 1960, FM broadcasting stations have increased at a rate of almost two FM stations for each AM station licensed by the FCC.

The remarkable growth in the number of FM commercial broadcasting stations in the period 1960 to 1972 can also be attributed to several key actions levied against the radio broadcasting industry by the Federal Communications Commission. The FCC had for some time been concerned with the continued proliferation of AM radio broadcasting stations. The Commission was receiving new applications for AM commercial broadcasting stations in areas which were already being served by several existing stations. The AM commercial broadcasting industry was becoming concentrated in large urban population centers with only a few new applications directed to sparsely settled or rural areas. By 1962 this problem had become so paramount that the FCC began to consider alternative solutions

with the goal of providing continued urban service but increased rural service. Therefore, that same year, as a measure designed to institute a degree of control on the rapid expansion and concentration of AM broadcast stations the FCC imposed a freeze on new applications for AM stations.[6] In 1964, new rules were placed in effect which were designed toward granting new AM broadcast station applications for underserved market areas.[7] These new rules did not stem the tide of reducing new applications in areas which already were being served by several existing commercial AM broadcasting stations. On September 5, 1969, the FCC announced stricter rules that would virtually close the AM service to new applicants. The rules laid rigid specifications on new AM applications for the type of service to be presented and the percent of population to be served. The applications had to provide service to an area previously unserved by a commercial AM broadcasting station. In addition, over 25 percent of the area population must be served by the applicant. If either of these two specifications were not met, the application was rejected. The FCC's intent was to accept only those applications which would contribute substantially to improving commercial radio broadcasting service to rural areas. The result of the Commission's new rules was that new applicants, desiring to remain in the populated urban centers, channelled their efforts into the FM broadcasting market which at this point was relatively free of any FCC constraints.

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[6]U. S. Department of Commerce, U.S. Industrial Outlook for 1970, (Washington, D.C.: U. S. Government Printing Office, 1970), p. 393.

[7]Ibid.

With the actions of the FCC channelling the emphasis to FM broadcasting, the commercial broadcasting industry instituted a substantial program to educate the public on the characteristics and advantages of FM. The success of this program is evident in the figures from the Electronic Industries Association (EIA) on the number of FM radio set sales from 1960 to 1972. In 1960 there were 1,844,000 FM receivers sold through various outlets in the United States.[8] In 1972, this figure had climbed to over 27 million.[9] The EIA data showed that 57.2 percent of all homes in the United States had an FM receiver in the household by 1972.[10]

The growth of FM receiver sales was an indicator included as one of the qualifying factors used by the U.S. Department of Commerce when they forecast continued growth and profitability for FM broadcasting. In their "U.S. Industrial Outlook for 1970," they stated the following:

> Over the next five years the radio broadcasting industry can expect the healthy growth it has experienced in the past to continue, paralleling the growth of the economy and the steady rise in expenditures for advertising. The expansion in the number of AM stations should slacken, but the number and profitability of FM stations should increase.[11]

As was the case with the number of FM broadcasting stations showing a continued increase during the 1960 to 1972 time period, the operating revenues of FM stations also continued to rise. The annual

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[8]Electronic Industries Association (EIA), Dimensions of Radio, (Washington, D.C.: National Association of Broadcasters, 1974), p. 22.

[9]Ibid.

[10]Ibid., p. 23.

[11]U.S. Department of Commerce, U.S. Industrial Outlook for 1970, (Washington, D.C.: U.S. Government Printing Office, 1970), p. 393.

revenue for FM broadcasting stations which provided reports to the FCC for the period 1962 to 1972, is shown in Table 2.

TABLE 2

FM REVENUE 1962 TO 1972

Year	Total Number of FM Stations Reporting	Total FM Revenue (Millions)	Percent Change*
1962	993	$ 13.9	----
1963	1,071	16.3	17.2
1964	1,175	19.7	20.8
1965	1,381	24.7	25.3
1966	1,575	32.3	30.7
1967	1,706	39.8	23.2
1968	1,888	53.2	33.6
1969	1,961	67.4	26.7
1970	2,105	84.9	25.9
1971	2,235	115.0	35.5
1972	2,322	151.9	32.1

SOURCE: Federal Communications Commission, "AM and FM Financial Data 1962-1972," (Washington, D.C.: U.S. Government Printing Office, 1973).

*Percent change figures for years 1962-1968 computed by author. Percent change figures for years 1969-1972 computed by source.

Profit levels among commercial FM broadcasting stations are not completely available. Many commercial FM stations are operated in association with a commercial AM broadcasting station. Stations in this category were asked by the FCC to make a reasonable allocation of joint revenues and expenses to their AM and FM operations separately. The

financial data available for independent FM stations and FM stations associated with AM stations but reporting separately are shown in Table 3.

TABLE 3

FM FINANCIAL DATA 1962 TO 1972

Year	Number of Independent FM Stations Reporting	Revenue (Millions)	Number of AM/FM Stations Reporting Separately	Revenue (Millions)
1962	279	$ 9.3	*	*
1963	294	11.4	*	*
1964	306	12.8	*	*
1965	338	15.7	*	*
1966	381	19.4	*	*
1967	405	22.6	*	*
1968	433	28.3	*	*
1969	442	33.4	179	$12.1
1970	464	40.6	225	18.3
1971	527	55.3	241	26.3
1972	590	77.4	275	37.5

SOURCE: Federal Communications Commission, "AM and FM Financial Data 1962-1972," (Washington, D.C.: U.S. Government Printing Office, 1973).

*Denotes Data Not Available.

Without complete reporting of all FM commercial broadcasting stations it is difficult to make reasonable analysis of profit trends in the FM broadcasting industry. Data are available and have been

reported by the FCC on the average profit and loss per station on those independent FM stations which submitted complete financial reports to the Commission. For those stations sustaining a profit, the average profit was $31,577.[12] The average loss on the other hand was $43,333.[13] For those FM stations associated with AM stations but reporting separately, the average profit was $45,923 while the average loss was $52,030.[14] Although past profit levels for the commercial FM broadcasting industry have not shown overall success, the growing acceptance of FM by the public and increased expenditures by the industry have led the U.S. Department of Commerce to forecast an increase in the profit levels of commercial FM broadcasting stations in the future. From their "U.S. Industrial Outlook for 1972," Commerce department officials have concluded

> Radio can expect continued growth in the seventies with revenues rising at an average annual rate of about seven percent. Earnings, too, should enjoy a healthy rise from the depressed levels of 1970 and 1971 provided that costs are kept under reasonable control. Most of the new stations will be FM, with the number of AM stations increasing only moderately.[15]

The Role of FM Broadcasting Stations

The continued growth and acceptance of FM broadcasting can be attributed in part to the unique qualities of FM in comparison to its AM counterpart. FM broadcasting is accomplished through a variation

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[12]Federal Communications Commission, "AM and FM Financial Data 1962-1972," (Washington, D.C.: U.S. Government Printing Office, 1973), p. 13.

[13]Ibid.

[14]Ibid.

[15]U.S. Department of Commerce, Industrial Outlook for 1973. (Washington, D.C.: U.S. Government Printing Office, 1973), p. 345.

of the frequency waves of radio rather than the amplitude of radio waves as in AM broadcasting. This particular characteristic of FM provides it with a rather unique set of qualities. FM broadcasting is freer from static than its AM counterpart. Static is caused by electrical charges of the atmosphere. These electrical charges can interfere or distort amplitude waves but do not have this distortive effect on frequency waves of FM. FM broadcasting also obtains a much greater quality of sound through its variation of the frequency waves. This quality of sound remains one of FM's greatest attributes especially in stereophonic and quadrophonic broadcasting roles.

Another unique quality of FM is that FM broadcasting stations are able to operate close together without causing station-to-station interference. This advantage, coupled with the ability to broadcast in any area without overlap or interference. AM broadcasting with its amplitude of radio waves on a specified frequency must have a much wider separation between station frequency allocations. FM radio, on the other hand, uses a modulation technique of its allocated frequency and does not become susceptible to frequency overlap or interference.

Another advantage of FM is the use of a "line-of-sight" transmission which is direct from the station transmitter to the listener's receiver. AM broadcasting utilizes ground and sky waves to transmit signals. This characteristic of AM is the reason for the considerable amount of change in both quality and intensity of reception which is present when local weather conditions change. FM signals are generally transmitted in a horizontal pattern, but in mountainous areas and those

sections of the country with rough terrain, the addition of vertical polarization to station transmitters allows finer FM reception.[16]

The preceding advantages of FM broadcasting over its AM counterpart have been a strong factor in the number of applications being processed for commercial FM broadcast station licenses since 1960. In the last few years FM broadcasting received a distinct operating characteristic that in many ways has substantially increased the popularity of FM. This characteristic is the ability of FM broadcasting stations to transmit in stereophonic and quadraphonic methods. A commercial FM broadcasting station can transmit its programming in monaural, stereophonic, and most recently in quadrophonic mediums. This additional capability has added a quality to FM broadcasting which far surpasses its AM counterpart. This dimension of FM allows for a much wider range in station operation than is available to an AM broadcasting station. It is FM's quality and diversification ability that has provided such an impetus in the industry to establish an FM broadcasting station.

The Federal Communications Commission has established three classes of FM commercial broadcasting stations. Basically each station is differentiated by the type of area served, the amount of power allotted for its transmitter, and antenna height.[17] The three classes of commercial FM broadcasting stations are:

> Class A: Class A stations are intended to render service to a relatively small community and its

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[16] National Association of Broadcasters, FM A Look At Frequency Modulation Radio, (Washington, D.C.: National Association of Broadcasters, 1969), p. 3.

[17] Federal Communications Commission, Information Bulletin 1-B, "How to Apply for a Broadcast Station," (Washington, D.C.: U.S. Government Printing Office, 1973), p. 1

immediate area, a radius of about 15 miles. Power output is from 100 watts, to 3,000 watts. Antenna height of 300 feet is maximum.

Class B: Class B stations are intended to render service to a sizable city, within a radius of 40 miles. Power output is from 5,000 to 50,000 watts. Antenna height is a maximum of 500 feet.

Class C: Class C stations are intended to render service to a large surrounding area, within a radius of 65 miles. Power output is from 25,000 to 100,000 watts. Antenna height is 2,000 feet maximum.

The specific type of station to be operated is largely dependent upon the factors listed above and the proposed service the station will provide the community. When applying for license to construct and operate a commercial FM broadcasting station this information along with required service information must be specified in detail to the FCC before the Commission will review the application.

One of the key features envisioned as a growth factor for commercial FM broadcasting stations is the stereophonic and quadraphonic broadcasting mediums. In 1972, the Department of Commerce Industrial Outlook for 1972, projected growth for FM throughout the 1970 to 1980 time frame based upon wider use of stereophonic and quadraphonic broadcasting. Their projection stated,

> The number of FM stations broadcasting stereophonic programs and transmitting functional music to commercial subscribers should increase during the seventies. Quadraphonic FM broadcasts of the encoded two channel type that provide compatible monophonic and stereophonic signals in accordance with present FCC standards are likely to increase as specially prepared program material becomes available.[18]

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[18]U.S. Department of Commerce, U.S. Industrial Outlook for 1972, (Washington, D.C.: U.S. Government Printing Office, 1973), p. 345.

The growth of FM stereo broadcasting from 1963 to 1973 is indicated in Table 4.

TABLE 4

GROWTH OF OPERATING FM STATIONS BROADCASTING IN STEREO

Year	Total Number of FM Stations	FM Stereo	Percent in Stereo
1963	1,120	239	21.3
1964	1,181	279	23.6
1965	1,343	350	26.1
1966	1,515	477	31.5
1967	1,708	610	35.7
1968	1,850	731	39.5
1969	2,018	787	39.0
1970	2,126	1,014	47.7
1971	2,256	1,353	60.1
1972	2,352	1,345	57.2
1973	2,411	1,797	74.0

SOURCE: "1973 Radio Financial Report," (New York: National Association of FM Broadcasters, 1974).

The increasing trend for FM stereo broadcasting and the introduction of quadrophonic broadcasting equipment into the market has provided a substantial boost to the FM broadcasting industry. Other actions are being taken by the National Association of FM Broadcasters (NAFMB) to increase the availability of FM receivers to the public. One such action is a proposal to be submitted before the Congress of

the United States to pass legislation requiring radio-set manufacturers to include FM in all domestically built radio sets.[19] Another action undertaken by the FM broadcasting industry is to promote research and development in FM systems to reduce noise levels in existing FM receivers and provide the listening public with even clearer and sharper signal strength and reception. The FM broadcasting industry is taking positive steps to increase and continually improve the quality and uniqueness of FM listening to the public. Such actions will be the foundation for continued growth and profitability of the industry in the future.

Federal Government Participation and Control in Broadcasting

The controlling agency for all operations in the broadcasting industry is the Federal Communications Commission. The Commission is an independent government agency responsible directly to Congress. It was established in 1934 with the passage of the Communications Act and is charged with regulating interstate and foreign communications by radio, television, wire, and cable.[20] It is responsible for orderly development and operations of broadcast services and for rapid, efficient, nationwide and worldwide telegraph and telephone service at reasonable rates.[21] Other functions include the promotion of safety of life and property through radio, and the use of radio and television facilities to strengthen national defense.

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[19]"FCC Change of Heart Not Cheered by FM's," Broadcasting, Vol. 80, (Washington, D.C.: Broadcasting Publications, Inc., April 1971), p. 52.

[20]Federal Communications Commission, Rules and Regulations, Part I, (Washington, D.C.: U.S. Government Printing Office, 1971), p. 2.

[21]Ibid.

All broadcast services are regulated by the FCC. The Commission must approve all applications for construction permits and licenses for such services. The FCC assigns frequencies, sets operating power, designates call signs, inspects and regulates the use of transmitting equipment.[22] The FCC does not censor programs, but licensees are required to show they operate in the public interest, convenience, and necessity. This action is accomplished by the FCC during initial license review and when license renewal requests are submitted.

The FCC is directed by seven Commissioners, appointed by the President and confirmed by the Senate for seven year terms. The Commission supervises all FCC activities, delegating responsibilities to staff units, bureaus, and committees. The Commission consults with other governmental agencies and departments on national and international matters involving wire and radio communications. Coordination is accomplished with state regulatory commissions on telephone and telegraph matters.

The Federal Government, through the Federal Communications Commission, controls entry into the commercial radio broadcasting industry. The FCC has established explicit procedures for applying for a commercial broadcasting license. These procedures have been set out in FCC Information Bulletin No. 1-B.[23]

Licensing procedures for construction of a commercial broadcasting station are open to any qualified citizen, firm, or group.[24]

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[22] Ibid.

[23] Federal Communications Commission, Information Bulletin No. 1-B, "How to Apply for a Broadcast Station," (Washington, D.C.: U.S. Government Printing Office, 1973), p. 1.

[24] Ibid.

These procedures are basically that the applicant must satisfy the FCC that he is legally, technically, and financially qualified and that the operation of the proposed station would be in the public interest. The FCC requires formal notice on the part of each applicant before approving the request for a license.[25] The applicant must give formal, legal notice of intent to establish a broadcasting station in the community in which the station will be operated. This action allows any citizen, firm, or group opposed to the application a chance to register objections with the FCC. If no objections are raised the FCC will grant its approval on the application to allow the applicant to proceed with construction and equipment test operations. Final licensing actions are taken by the FCC only after completion of construction and test operations in which the applicant must satisfy the Commission that all station operations have been constructed and conform to FCC rules and standards. Only then will the FCC grant the license for bull station operations.

Summary

The broadcasting industry has shown a remarkable growth in the past 15 years. The FM broadcasting segment of the industry has made a steady advancement in the number of stations, quality and type of broadcasting service, and growing profit levels. A general review of the factors which influence the industry, both in past and current operations, as well as some future prospects for FM broadcasting has been presented. Attention is turned to the specific economic factors of a commercial FM broadcasting station in Chapter III of this paper.

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[25] Ibid.

CHAPTER III

ECONOMIC FACTORS OF THE COMMERCIAL FM BROADCASTING STATION

Capital Requirements

The capital requirements for establishing and for operating an FM broadcasting station are considered in this chapter. The first is the initial capital requirements associated with the investment in real property. Station offices and broadcasting facilities are included in this category along with physical plant and transmitter sites. This form also includes investment in physical assets such as electrical broadcasting equipment, furnishings, and initial programming materials. The second form of capital requirement to be discussed represents the recurring contributions necessary to sustain continued operations. This category includes such items as funds to expand facilities, to obtain new or additional programming materials, and for replacement of broadcasting equipment.

Of the two requirements, the first area of investment represents the most significant outlay of funds. Because of the diversity in size, location, and formats of FM broadcasting stations, it is not practical to attempt to establish a figure for the average initial investment required. Such a figure is highly dependent upon the amount of power wattage of the station transmitter and physical assets necessary to conduct operations; on the location and cost of the property upon which

the station is to be housed; and finally, upon the particular programming format with its associated costs in materials and personnel. All the above significantly determine how much initial capital will be required.

The variable nature of the initial capital outlay can be traced in part to the growth rate enjoyed by the FM segment of the industry. One area alone, the amount required to obtain an FM license, depicts the rising trend in investor interest in the industry. Mr. Ted Hepburn, Vice President of R. C. Crisler and Company, a media brokerage firm, stated in an article in the Wall Street Journal,

> ....at the very least, this interest has generated a strong futures market in FM station licenses. In San Francisco, ...the price of a FM station license, apart from any other elements of the business, rose to about 1.5 million dollars from about five thousand dollars four years ago. In Miami, the price has skyrocketed 800% in four years, to 1.4 million dollars from 175 thousand dollars. Atlanta has witnessed an estimated 500% increase.[1]

With all factors considered, the evidence points to the fact that a large sum will be required to establish and begin operations of an FM broadcasting station. In contrast, recurring capital contributions are not as large or as frequent as those experienced in many business ventures.

Recurring capital contributions in the broadcasting industry center around expansion of operating facilities, replacement of equipment and changed or modified programming materials. The relatively infrequent nature of these type actions are responsible in part for reduced additional capital requirement. The sophisticated state of electronic broadcasting equipment with its solid state components and

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[1]Michael J. Connor, "Swinging Stepchild, FM Radio, Long Neglected, Catches On," Wall Street Journal, April 8, 1974.

long operational life span reduces the requirement for costly asset replacements which many other businesses incur. Once the initial outlay of capital has been accomplished for the sophisticated broadcasting equipment, a high quality preventive maintenance program can sustain this equipment at full operating capacity with relatively no additional funding required for replacement or modification.

Recurring capital contributions are most necessary for programming format changes. As all programming is styled to present a particular format in accordance with audience preferences, any changes in these preferences can cause a station to acquire newer, more costly, or more sophisticated program formats. An example has been the introduction of quadrophonic broadcasting techniques in the FM broadcasting industry. This particular innovation has required the addition of newer and more sophisticated broadcasting equipment in both households and in broadcasting stations. Stereophonic broadcasting, introduced in 1961 also had the same effect and required additional capital to update broadcasting requirements in response to public demand.[2]

Capital requirements for establishing and operating an FM broadcasting station are highly dependent upon the size of station desired, transmitter output, and specific broadcasting equipment necessary to present its programming format. Another factor, location, in terms of population centers, number of competing broadcasting stations--both AM and FM radio as well as TV--can also play a major role in determining the amount of capital required to begin operations.

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[2]National Association of Broadcasters, FM, A Look At Frequency Modulation Radio, (Washington, D.C.: National Association of Broadcasters, 1969), p. 5.

Programming format and other operating requirements in the form of personnel and general operational expenses can establish a fairly large capital requirement for an initial investment in a station. However, the continued successful growth record of FM broadcasting has established an area for investment opportunities and rewards within the broadcasting industry.

Asset Requirements

For a commercial FM broadcasting station the asset structure required is usually standard and consists of all property, plant, equipment, and broadcasting rights associated with the FCC approved broadcasting license.[3]

Property includes land where all station buildings are erected. The station structures themselves are also included under property assets but may sometimes be listed separately under the category "plant" or "structures." Station structures normally include two separate categories. The first consists of general station operations facilities which include all studios and general business offices. The second category consists of a transmitter site which normally is not located with the general operations structures. The transmitter site generally has one or two small buildings which house all transmitting equipment and adjoins the station's transmitting tower.[4]

The equipment asset account generally includes all electrical broadcasting equipment such as the station transmitter, tower and antenna systems, studio and mobile broadcasting equipment, office furniture and

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[3]Ward L. Quaal and Leo A. Martin, Broadcast Management, Radio and Television, (New York: Hastings House, 1968), p. 171.

[4]Ibid.

fixtures, and station vehicles.[5] The equipment account represents the most extensive of all asset accounts for a commercial FM broadcasting station and generally involves the largest output of funds. The total amount of the investment in tangible broadcast equipment of FM stations for the years 1960 to 1972 is shown in Table 5. An indication is provided of the costliness of broadcasting equipment.

TABLE 5

FM RADIO STATION INVESTMENT IN

TANGIBLE BROADCAST PROPERTY

Year	Amount Invested (Millions)
1960	$ 8.1
1961	9.4
1962	10.4
1963	13.2
1964	14.2
1965	16.7
1966	21.9
1967	25.3
1968	29.7
1969	51.1
1970	62.2
1971	78.1
1972	93.3

SOURCE: National Association of Broadcasters, Dimensions of Radio, (Washington, D.C.: National Association of Broadcasters, 1974), p. 6.

The final asset account involves the capital investment to secure sole broadcasting rights, scale of output, and frequency assignment. This broadcasting right is incorporated in the broadcasting license secured from the Federal Communications Commission. This action is listed as an asset account as it is required by law that the station submit an

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[5] Ibid.

application to the FCC for approval to provide broadcasting services in a designated area on an assigned frequency. An initial application fee must accompany the initial request for broadcasting services. After approval by the FCC the license must be renewed every year and the renewal is granted pending submission of a renewal fee and the absence of any violations of FCC broadcasting regulations. Once granted, the license serves as a patent to the broadcaster and prohibits any other broadcasting agency from using the assigned frequency or call letters or to conduct competing services. As such, the approved broadcasting license becomes a sole assigned asset of the single broadcasting station and is therefore listed as an asset account by most commercial FM broadcasting stations.[6]

A final asset category common to most FM broadcasting stations is investment in programming formats and materials. For each FM station, programming formats can be either locally produced or obtained; or can be purchased from nationally syndicated media firms.[7] In either case, the station must place an outlay of capital funds for the purchase of all programming formats, materials, or services. These programming formats and materials become a permanent fixture of the station and represent the "product" the station sells and thus is listed as an asset in the station accounts.

The basic asset structure of most FM broadcasting stations is standard. However, the success of the station in both operations and

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[6]Federal Communications Commission, Information Bulletin No. 1-B, "How to Apply for a Broadcast Station," (Washington, D.C.: U.S. Government Printing Office, 1973).

[7]Tom Bradshaw, "FM Radio '74. Is Ad Revenue Pace Matching Ratings Boost," Television/Radio Age, (New York, 1974).

year-end profit becomes dependent upon the proper combination of these assets. This is influenced by two factors: the potential market for advertising spot sales, national and regional time sales; and demographic character and makeup of the potential listening audience.[8] Correct programming formats and materials attract a faithful audience which, when demonstrated to potential advertisers, result in increased sponsors for time on the air in advertising spot sales, and is the combination which makes for a successful broadcasting station. The successful growth trend of FM broadcasting is the result of many studies of the potential market requirements in selected areas and demographic character and makeup of today's FM listening audience. These studies have produced the following data:

> The 1974 RADAR report which shows that the national FM share of radio listening is now up to 33 percent of the total. In 1973, the figure was 28 percent so there has been an almost 18 percent increase in the overall FM audience. It is estimated that 1973 ad billings were some $190 million. In 1972, RADAR put the FM share at 25 percent while the Federal Communications Commission posted the FM time sales at $151.9 million. It would seem, based on these figures, that FM billings between 1972 and 1973 increased at more than double the rate of FM listenership boost.[9]

As indicated above, the proper combination of programming, market potential for advertising sales time, and potential listening audience has a significant impact on the economic factors of establishing and operating an FM broadcasting station.

Increases in potential listening audiences have also been reported from several surveys.

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[8]Quaal and Martin, Broadcast Management, p. 30.

[9]Bradshaw, Television/Radio Age, p. 3.

> A Pulse 30-market FM penetration survey revealed that 18 of the top 30 markets have reached or bettered the 90 percent mark in FM penetration.[10]

> A 1973 FM listening pattern survey by CBS/FM Sales shows that the percentage of occasional FM listeners increased from 22 to 35 and frequent FM listeners increased from 19 to 35 since 1966.[11]

The economic considerations of proper asset management in FM broadcasting are influenced by the ability of management to meet the desires of the listening public. The successful FM growth record has been mainly due to the continuing ability of the FM broadcasting industry to measure accurately the public demand for the proper combination of programming and advertising spot sales. The industry is oriented toward providing the proper asset and programming combinations to increase listenership and advertising sales revenue. As pointed out by Mr. Gordon Hastings, director of development at KATZ radio.

> The key to the future of FM is....the number of different people listening to the total medium at any given moment. For it is these figures that will ultimately prove that the result of your programming expertise can deliver a major share of the particular population demographic that the advertisers seek to reach.[12]

Financial Requirements

Financial requirements presented in this section of the paper concentrate on four general areas: sources of operating revenue; uses of operating revenue; cost structures; and profit structures. These four areas were selected to provide the most representative information a potential investor would be desirous of knowing.

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[10] Ibid.

[11] Ibid.

[12] Ibid.

The average FM broadcasting station has two sources of income. The primary source is revenue received from the sale of broadcasting time for network, national and regional spot and local advertising.[13] Secondary sources of revenue come from the sale of talent, sale of recorded and transcribed materials, station facilities rental, merchandising activities, and interest and dividends from station investments.[14] Each of these income sources is a result of the sale of two primary station assets: time on the air; and programming materials and personnel talent. The optimization of station revenue is highly dependent upon the effective and efficient management of these two prime station assets.

FM revenue from spot advertisements are originally low because FM advertising salesmen were forced to compete with the more prolific AM sales representatives who could offer a larger listening audience and thus more exposure to advertising messages. To compete with AM for spot sales time, FM sales representatives were initially forced to offer time on the air at a lower price than their AM counterparts.[15] The growth of FM listening audiences has spurred competitive pricing policies in the FM industry which are more commensurate with the AM pricing policies and have subsequently increased FM advertising revenue accordingly. As more and more FM sales representatives obtain increased advertising spot sales at competitive prices the revenue of the FM broadcasting industry should increase.

The trend has already been noted by the results of an FM revenue growth study released by the Institute of Broadcasting Financial

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[13]Quaal and Martin, Broadcast Management, p. 173.

[14]Ibid.

[15]Bradshaw, Television/Radio Age, p. 5.

Management in which it was reported that most FM stations had a large percentage increase in revenue based on a comparison of first quarter 1973 spot sales to first quarter 1974 spot sales.[16] As advertising sales revenue continues to go up then the financial stature of most FM broadcasting stations will also show a significant improvement.

The growth of FM listenership has also provided increased revenue from secondary sources of income. The use of local talent in local events provides exposure to station representatives which in turn may lead to increased listening audiences. The sale of merchandising and transcribed materials to other business enterprises has opened up a large source of funds to FM broadcasting stations.[17] In both cases, revenue sources are improving and financial reports are showing increased revenue for FM broadcasting stations.

The uses of operating revenue are generally centered around the payment of current expenses in operations of a commercial FM broadcasting station. Outside investment programs to produce investment credit in the form of interest and dividends is accomplished by many FM radio stations. However, revenue from primary and secondary income sources are employed to provide payment of station operations and personnel expenses. Maintenance and minor asset replacement costs are also covered by current income. In general, these are the primary uses of the major sources of income. A more detailed listing of costs incurred as a result of operational expenses is listed in the following paragraphs.

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[16] Ibid.

[17] Quaal and Martin, Broadcast Management, p. 173.

Normal station expenses are broken down into four general categories: programming expenses, engineering expenses, sales expenses, and general and administrative expenses.[18]

Programming expenses are the most comprehensive of the four categories listed. These cover salaries of the programming staff, rights and costs of programs, license fees, recordings and transcripts, news and wire services, and sets and props.[19] General and administrative expenses are the second most comprehensive expense category for the typical FM broadcasting station. These expenses involve the costs of general office operations and include wages and salaries of senior directors and staff personnel as well as general administrative staff and all office expenses.[20]

Sales expenses encompass the third most comprehensive expense category. Included in this account are commissions of sales representatives, public relations, advertising and promotions, and rating and subscriber services.[21] Engineering expenses cover costs incurred for equipment operation.[22] Maintenance and salaries and wages of engineering staff and personnel are included in this expense category.[23]

With revenue and cost structures outlined above, a more comprehensive view of income sources and cost structures and their percentage composition compared to total revenue and total expenses is presented in Table 6.

As depicted in the table, for stations which reported revenue and expense data to the National Association of Broadcasters (265 stations)

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[18] Ibid., pp. 174-175. [19] Ibid. [20] Ibid.
[21] Ibid. [22] Ibid. [23] Ibid.

TABLE 6

(PART I)

REVENUE AND EXPENSES, FM STATIONS NATIONWIDE, 1973

Revenue and Expense Items	Typical Dollar Figures	Typical Percent Figures	Middle 50 Percent Range Figures
Profit Margin		(3.15)	(34.55) - 8.44
Total Broadcast Revenue	$90,000		$50,900-150,000
Trade-outs and Barter	2,300		100- 5,500
Total Time Sales From:	90,000	100.0	47,800-152,700
Networks	----	-----	------
National and Regional Advertisers	4,200	4.7	0- 22,600
Local Advertisers	85,800	95.3	43,400-136,700
Total Broadcast Expense From:	$92,800	100.0	$62,400-153,900
Technical	9,300	10.0	4,500- 17,500
Program	29,200	31.5	18,400- 43,600
Selling	18,700	20.2	8,300- 36,500
General & Administrative	35,600	38.3	20,700- 63,700
Depreciation and Amortization	8,800		4,800- 14,500
Music License Fees	2,100		1,200- 4,400
Profit (Before Taxes)	($ 2,800)		($26,000- $9,100

TABLE 6 - Continued

(PART II)

REVENUE AND EXPENSES, FM STATIONS REPORTING PROFITS IN 1973

Revenue and Expense Items	Typical Dollar Figures	Typical Percent Figures	Middle 50 Percent Range Figures
Profit Margin		10.45	5.70 - 26.75
Total Broadcast Revenue	$117,800		$76,400-189,500
Trade-outs and Barter	3,000		0- 9,100
Total Time Sales From:	144,100	100.0	75,600-206,400
Networks	-----	-----	-------
National and Regional Advertisers	6,000	4.9	100- 25,300
Local Advertisers	116,100	95.1	71,200-177,600
Total Broadcast Expense From:	$105,500	100.0	$61,600-150,400
Technical	9,700	9.2	4,500- 17,500
Program	33,400	31.7	18,200- 44,200
Selling	23,400	22.0	9,400- 40,900
General & Administrative	39,200	37.1	19,700- 57,700
Depreciation & Amortization	8,300		4,200- 12,800
Music License Fees	3,300		1,800- 6,100
Profit (Before Taxes)	$ 12,300		$ 5,400- 38,700

SOURCE: Federal Communications Commission and National Association of Broadcasters, "1973 Radio Financial Report," (Washington, D.C.: U.S. Government Printing Office, 1974).

profit margins for 1973 averaged a 3.15 percent net loss on revenue received. For stations which reported a profit in 1973 (115 stations out of the total 265 stations reporting), the typical percent profit

margin was 10.45 percent with the middle 50 percent of those stations reporting obtaining a profit margin ranging from 5.70 percent to 26.75 percent. In dollar figures the typical net profit was $12,300, with the middle 50 percent of those stations receiving profit levels of from $5,400 to $38,700.[24]

Profit margins were influenced to a large part by two factors: population base in their market area; and total dollar revenue received from increased advertising spot sales receipts. Data groupings according to these two criteria for the 115 stations reporting a profit in 1973 are shown in Table 7.

TABLE 7

PROFIT MARGINS BY POPULATION AND REVENUE LEVELS FOR FM STATIONS REPORTING PROFITS IN 1973

Item	Typical Percent Figure	Middle Percent Range
A. Market Size (Population)		
1. 500,000 and over	19.95	3.88 - 33.89
2. 100,000 - 500,000	10.75	5.89 - 22.49
3. 100,000 and under	9.06	4.95 - 18.73
B. Revenue Size		
1. $100,000 and over	13.37	5.89 - 28.20
2. 50,000 - 100,000	7.21	2.16 - 13.33
3. 50,000 and under	13.77	7.29 - 30.28

SOURCE: National Association of Broadcasters, "1973 Radio Financial Report," (Washington, D.C.: U.S. Government Printing Office, 1974).

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[24] National Association of Broadcasters, "1973 Radio Financial Report," (Washington, D.C.: U.S. Government Printing Office, 1974).

The key to improved profit margins in the FM broadcasting industry has been increased revenue from the primary source of local and regional advertising spot sales. Increased emphasis is being placed by the industry to identify to potential advertisers the growth of FM broadcasting and the increased public listening levels of FM radio. The industry is also conducting extensive research to establish the most optimum programming format which the area listening public desires and which will produce the greatest exposure of advertising spot sales to the most people. Evidence of this latest action is in the table below which shows the degree of programming format changes accomplished in the one year period 1972 to 1973 that came about due to industry published data on consumer programming preferences.

TABLE 8

FM PROGRAMMING FORMATS AS A PERCENTAGE OF TOTAL BROADCASTING HOURS FOR 1972 AND 1973

Programming Format	1972	1973	Percent Change
Beautiful Music	19.3	30.0	+10.7
Middle-of-Road	21.4	12.0	- 9.4
Country & Western	10.6	11.5	+ 0.9
Contemporary Rock	9.8	10.0	+ 0.2
Combinations	6.8	11.0	+ 4.2
Others	32.1	25.5	- 6.6
	100.0	100.0	

SOURCE: Bradshaw, Television/Radio Age, September, 1974.

With continued emphasis on FM growth and listening levels, the profit margins of the FM broadcasting industry should show greater percentages of stations operating at a profit and reported net profits at higher levels. These factors contribute to a bright future for the FM broadcasting industry and increased investor opportunities for interested businessmen.

CHAPTER IV

MANAGEMENT OF THE COMMERCIAL FM BROADCASTING STATION

General Management

General management responsibilities for a commercial FM radio station are primarily centered around the functions of station organization, operations and programming direction, staff and personnel supervision, and financial review and control.[1] These general management functions are normally the responsibility of a single station official designated the General Manager.[2] The General Manager is responsible to conduct all station operations under authority from the owners and stockholders of the station.

The first responsibility of the General Manager is establishing the most effective organizational structure for the station.[3] In most commercial radio broadcasting stations the organization is oriented around the programming format of the station. Figure 1 depicts a typical commercial broadcasting organization. The organizational structure depicted allows for a direct management control line to each of the

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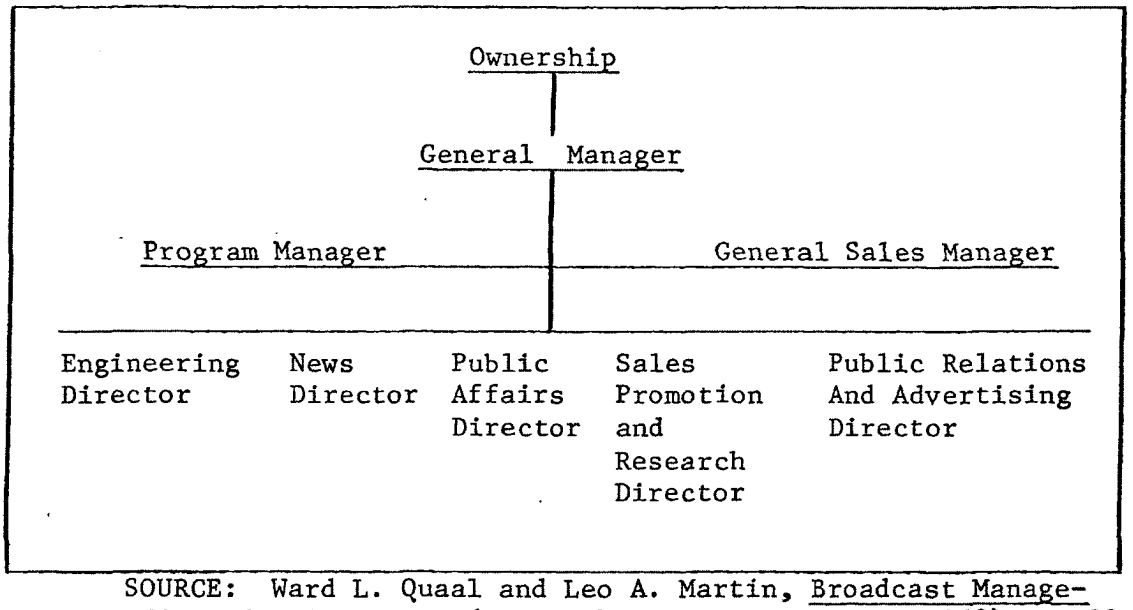
[1]Ward L. Quaal and Leo A. Martin, Broadcast Management, Radio and Television, (New York: Hastings House, 1968), p. 23.

[2]Ibid., p. 24.

[3]Jay Hoffer, Organization and Operation of Broadcast Stations, (Blue Ridge Summit, Pa.: Tab Books, 1971), p. 14.

primary operating elements of the station. Within each of the elements there is a management official who is responsible for its function.[4] These management officials represent the staff management functions for the typically organized station. Each is responsible to the General Manager. They provide direction and control of their operation element and conduct the major portion of the station's operations.



SOURCE: Ward L. Quaal and Leo A. Martin, Broadcast Management, Radio and Television, (New York: Hastings House, 1968), p. 32.

Fig. 1.--Typical Commercial Broadcasting Station Organization.

Each operating element concentrates on its specific responsibilities through an organizational structure of individual departments which are aligned toward either a special service the station provides (such as farm reports to rural communities or on-the-scene traffic reporting in larger urban communities) or more common broadcasting

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[4] Quaal and Martin, Broadcast Management, p. 26.

services (such as news, weather, sports, etc.).[5] The number and type of specific departments under each operating element of a commercial broadcasting station is largely dependent upon the type of service and programming format which the station adopts. The management representatives and General Manager must align each operating element and its subdivisions to closely parallel the objectives of the station charter, format, and programming.

While Figure 1 depicts a typical organizational structure, variations do exist. Most of these variations occur as a result of a specific type of programming format the station adopts. Further, they are generally expansions within the more typical organizational elements rather than a new or separate function. Stations which conduct both AM and FM broadcasting operations generally have a separate AM and FM division within its structure with a management official for each division responsible to the General Manager.[6]

Just as important as organizational structure is the formation and management of station staff and operations personnel.[7] A commercial FM broadcasting station requires several specially qualified personnel in order to conduct successful operations. The staff members and operations personnel are responsible for the actual day-to-day broadcasting role of the station. While the most commonly known facet of an FM station is its programming format, content, and announcers, to

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[5]Hoffer, Organization of Broadcast Stations, p. 56.

[6]Quaal and Martin, Broadcast Management, p. 42.

[7]Jay Hoffer, Managing Today's Radio Station, (Blue Ridge Summit, Pa.: Tab Books, 1968), p. 70.

successfully conduct daily operations requires a staff of both technically qualified engineers and broadcasting specialists in addition to general management and administrative personnel.

The staff functions for an FM station are generally performed by six to eight representatives who are normally directors of the operating elements of the station.[8] In many stations, a single representative may function in more than one capacity. In most cases, however, the staff consists of two or three technically qualified personnel, usually engineers, who are responsible for the operation of the electronic broadcasting equipment and the station transmitter. Also on the staff are two management specialists in the areas of advertising and market research to provide the research, planning, and supervision of the largest revenue source for commercial FM broadcasting stations--commercial advertisement.[9] The remaining two to four staff members are the general management support personnel who provide specific functional guidance and services for station operations. These staff members conduct programming operations and general management functions such as accounting and administrative operations. The combination of technical and specialty staff members provides general management with a small but functional staff to plan and conduct station operations.

The final function of general management is financial review and control. In most cases the financial operations of a commercial FM broadcasting station are not large enough to warrant a full time

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[8]Robert H. Coddington, Modern Radio Broadcasting-Management and Operation in Small to Medium Markets, (Blue Ridge Summit, Pa.: Tab Books, 1969), p. 144.

[9]Quaal and Martin, Broadcast Management, p. 173.

financial staff.[10] In these cases the General Manager acts as the financial director with the actual financial guidance and direction being accomplished by an established financial institution such as a bank. The General Manager will review with the financial institution all income sources and provide records of disbursements from station operations. Where station operations are large enough to require and warrant a full time financial director, this staff function is normally aligned in a typical organization structure with the senior management functions of program management and general sales management.[11] The financial manager functions as an advisory body to the General Manager on all financial matters pertaining to income and expense accounts as well as for profit and loss statements from total operations of the station.

The general management functions of an FM station are large in scope but explicit in their accomplishment. Each station operates according to the format submitted in its license application to the FCC. Thus, each commercial FM broadcasting station may differ in the manner of programming it adopts, but basic operating characteristics and management functions remain essentially standard between stations.

Operations Management

Operations management responsibilities for a commercial FM broadcasting station center around two key areas: the first key area involves operations personnel--station announcers, technicians, specialized and administrative staff.[12] The second involves programming

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[10]Quaal and Martin, Broadcast Management, p. 175.

[11]Ibid.

[12]Hoffer, Managing Today's Stations, p. 70.

management functions and requirements.[13] These two key areas form the basic personality or character of any commercial FM broadcasting station. It is these two areas of station operations that the listening public, the consumer of broadcasting services, identifies as the product for sale and which they will evaluate in terms of their response to the station's advertising or commercial services. Any mismanagement of station operations would be most apparent in these two areas and could result in lack of consumer response and/or potential cancellation of the station's broadcasting license. Operations management thus becomes the focal point of commercial FM broadcasting station operations.

The first key area mentioned above, operations personnel, is the area where a commercial broadcasting station, particularly an FM station, establishes its public image. It is in this area, through the voices of the station announcers, that the listening public identifies the character of the station.[14] It is primarily the quality of the announcers associated with the programming format that determines to a great degree the public support of the station.

An announcer for a commercial FM broadcasting station must have one quality--a clear, steady, and pleasant voice.[15] As it is the voice of the announcer the listening public receives and identifies with the station, so it becomes the primary attraction or distraction in station operations. Most commercial FM broadcasting station announcers

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[13] Ibid.

[14] Ibid., p. 92.

[15] Quaal and Martin, Broadcast Management, p. 25.

have received some formal training before going on the air.[16] The majority have received this training through accredited colleges or formal training schools endorsed by the National Association of Broadcasters.[17] General management must place a great deal of emphasis on this area of operations management. The recruiting, interviewing, selection, and promotion of good radio announcers becomes vital to insure the station will attract and maintain a sizable listening audience.

Closely related to the selection and management of a good staff of announcers is the necessity of insuring that fully trained and knowledgeable broadcasting technicians are employed to operate the station's technical broadcasting equipment.[18] The importance of having skilled technicians who are familiar with the complex studio equipment, transmitters and antenna systems, becomes evident any time a malfunction occurs which can cause an extended loss of air time and potential revenue. Technicians in a commercial FM broadcasting station are normally accredited through a formal institution which specializes in instruction of personnel in both radio and television broadcasting operations.[19] It therefore becomes imperative that general management seek out the best qualified, technically skilled personnel to operate their broadcasting equipment. A commercial FM broadcasting station could have the best announcers, the highest listening audience ratings,

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[16] Ibid.

[17] Coddington, Modern Broadcasting, p. 148.

[18] Ibid., p. 151.

[19] Ibid., p. 160.

and the strongest commercial advertising accounts possible, but without a highly trained and competent technical staff to operate and maintain the station broadcasting equipment at full authorized limits continuously, all other areas of station operations would be to no avail.

The area of personnel management involves one final special interest group, administrative and clerical personnel. These staff functions become important to insure proper broadcasting records are kept which accurately and correctly reflect all station operations. These personnel generally review all trade publications and FCC regulations to provide general management with the necessary forms, records, and correspondence the FCC requires be documented and submitted with annual reports and license renewals.[20] General management must recognize and actively seek out qualified administrative and clerical personnel to support all areas of operations management.

The second key area of operations management, planning and selecting the programming format, necessitates deliberate and complete inspection and review prior to beginning operations. Commercial radio programming formats have traditionally centered around the six catagories listed below:

> a. Top "40" Station Programming. Mostly rock and roll music and characterized by a fast pace and loudness. Production schedule is tight with the fast pace. Commercial advertisements are often interspersed with the music. Many stations employing this format also use promotional gimmics and conduct numerous contests. News broadcasts are minimal with mostly headlines being used. This type of programming format is mostly employed in the AM broadcasting segment of the industry but several FM stations have adopted this type of format to overcome the "highbrow" image previously labeled against the FM broadcasting segment of the industry.

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[20]Ibid., p. 174.

b. Good Music Station Programming. Contemporary music format interspersed with music from popular rock and roll as well as some music from past years. Programming and production is at a slower pace. The music is a deliberate mixture of vocal and instrumental versions of contemporary and popular songs. News broadcasts are more complete and longer in length. All promotional materials and commercial advertisements are presented in a conservative manner. Some AM stations have adopted this format; however, the dominant share of this programming format has been employed in the FM segment of the industry.

c. Background Music Station Programming. Almost exclusively in the FM broadcasting segment of the industry. The format provides mostly instrumental versions of popular and contemporary music styles. There are few breaks for commercial advertisements or news broadcasts.

d. Classical Music Station Programming. Also almost exclusively in the FM segment of the industry. The format may include, in addition to classical music, a live coverage of opera or symphony. Lengthy discussions on fine arts, contemporary affairs or educational topics are often offered as supplemental programming events. News broadcasts are wide in coverage and detail with an editorial or news commentary included with each broadcast.

e. Specialized Appeal Station Programming. This programming format is oriented normally to a particular community or area character. Most noteworthy in this catagory is the country and western programming format. This particular format is most prevalent in the AM segment of the industry but some growth of country and western programming has begun in the FM segment of the industry. Other prominent programming formats along specialty lines which the FM industry has maintained the largest share include stations which specialize in foreign language programming, race relations or race oriented programming, jazz music, religious activities, and sports stations.

f. All Talk Station Programming. Programming centered around conversation programs for the entire broadcasting day. Most include a large number of commercial advertisements and lengthy news commentaries. Many audience participation programs for both a studio audience and home audience. Generally associated with the AM segment of the broadcasting industry.[21]

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[21] Quaal and Martin, Broadcast Management, p. 70.

Typical station operations center around the particular programming format which the station has been licensed to conduct. It is the overall responsibility of the General Manager to plan, prepare, and conduct all station operations in accordance with the FCC approved format the station submitted in its license application. All planning operations must focus on the key element of a broadcasting station's prime function: the sale and use of time on-the-air.[22] The General Manager and his staff must know how best to use this time on the air, and establish the program format that provides an optimum allocation of all time the station is authorized to conduct its broadcasting operations.

General management must establish strict time tables for station operations.[23] Several planning factors which govern the type of material scheduled for broadcast include time of day operations and programs are to be broadcast, potential listening audience, special events on both a local and national level, subscribed services from both private and affiliated broadcasting networks, and the number of, as well as type of, commercial advertisements to be broadcast.[24] Each of these activities must be scheduled into the available broadcasting day to allow for their most optimum exposure and impact upon the listening audience.

In planning operations, one of the options available to general management is affiliation with a national broadcasting network for

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[22] Ibid., p. 29.

[23] Ibid.

[24] Ibid.

specialized or catagorized programming activities.[25] This affiliation provides management with a larger program base and an opportunity to offer material which might be unavailable at the local level or too expensive to conduct on its own. The affiliated services also provide commercial broadcasting stations with supplemental material which may be offered at the local level while not being broadcast on a national level. The advantage of an affiliated broadcast service is that it allows the commercial FM broadcasting station to supplement its own programming and operations with a more varied, detailed and regular programming feature at a subscription price substantially less than that the station itself would have to remit for similar features.[26]

Summary

Management of the commercial FM broadcasting station encompasses general management functions of organization, formation of a qualified staff, and planning operations. Operations management is oriented around two key areas--personnel management and programming operations management. The central official responsible to tie the entire function and responsibilities together is the station General Manager. This section of the study has centered around the identification of the typical managerial organization and scope of responsibilities in a commercial FM broadcasting station. These responsibilities were presented to familiarize the reader with typical managerial functions within an FM station and together with the information in Chapters II

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[25] Sherman P. Lawton, The Modern Broadcaster--The Station Book, (New York: Harper and Brothers, 1961), p. 101.

[26] Sherman P. Lawton, Modern Broadcaster, p. 101.

and III provide sufficient background to prepare for intelligent investigation of the managerial and economic factors presented in the next chapter of this paper prior to a decision to invest in the establishment and operation of a commercial FM broadcasting station.

CHAPTER V

ESSENTIAL FACTORS IN ESTABLISHING AND OPERATING A COMMERCIAL FM BROADCASTING STATION

Chapters I through IV of this paper have provided background information on the basic managerial and economic functions of a commercial FM broadcasting station and the FM broadcasting industry. Each section described specific items which are essential to understanding how a station is organized and how it conducts its operations. Also discussed were the factors from both inside and outside the industry which have an influence upon these operations. Those managerial and economic factors which have a large influence on the initial decision to establish and operate a commercial FM broadcasting station and which deserve special attention in the initial planning stages are examined in this chapter.

Managerial Factors

Essential managerial factors are encompassed in two prime functions; establishing the station's organizational structure, and planning station operations format and programs. These two functions are basic and critical to the initial planning stages of an FM broadcasting station.

Station organization, as pointed out above, must be established and managed according to the type of broadcasting services to be presented.

As also pointed out in Chapter IV, most commercial broadcasting stations have a fairly standard organizational structure. Initial planning sessions should establish the basic organizational structure for the new station similar to the industry standard. With this basic structure established, management can then modify the format to position any unique or specialized function the station will include in its operations. In most cases, this basic organizational structure will provide a flexible yet functionally oriented standard form from which to begin initial operations of the station.

The largest and possibly the most involved managerial task in establishing and operating a new FM station is the selection of the correct programming and operations format for the station. Included in this task is the review, study, and analysis of alternative programming formats along with the establishment of pricing policies and procedures for advertising spot sales programs.

The task of selecting the proper programming format involves several essential actions. First and foremost, management must survey the current market for programming formats already in use in their area. Identified in Chapter III are four primary programming formats most generally adopted by FM broadcasting stations. These programming formats have been reviewed and analyzed by industry task groups and ranked by order of consumer preference. Management must give special attention to the results of industry programming preference surveys when selecting the format for their station. In addition, consideration should also be given to conducting a survey of the planned coverage area of the new station to receive community preferences to proposed formats and programming. The final selection of a programming format should be heavily weighted

toward the combined results of all the above mentioned essential planning steps.

Once the programming format has been determined, management must then direct its efforts to preparing an advertising and spot sales program which will provide potential advertisers with quality, timely, and effective advertisements and the station with a substantial source of operating revenues. The key to a successful advertising and spot sales program is competitive pricing with quality advertisements. Initial advertising prices must be set at a level competitive with existing stations and other media forms. Consideration should be given to some form of introductory pricing at reduced rates to attract advertisers from existing competitive sources followed by a promotional campaign of effective, continued quality advertising at normal prices. A highly trained and knowledgable sales force is essential also to a successful advertising program. As advertising spot sales present the station with the largest percentage of its operating revenue, so should management devote a large portion of its initial planning operations to its advertising pricing, policies, and procedures.

The managerial factors to be considered in establishing an FM station are essentially establishing a functionalized organizational structure centered around the selected programming format. It becomes imperative that management conduct extensive research into local community preferences for a programming format, consult industry surveys and studies on programming and its effectiveness, and review competing programming formats in the area before selecting their programming format. These particular tasks are to a large degree the factors which will determine how successful the station will be.

Economic Factors

Economic factors in starting a station vary widely, depending upon station size, type of operation, location, management policy, competition, and the community.[4] Deserving special comment are three essential areas within the classification of economic factors, pertinent to planning considerations in establishing and operating an FM broadcasting station. The first area is discussion of capital requirements that will be necessary to establish, construct, and cover operations of the station. The second area is an analysis of station asset requirements. The third consists of a review and analysis of business indicators that should be accomplished to provide a current basis for general operations, and policies and procedures.

A review of capital requirements that will be necessary to establish and conduct initial operations is paramount in the early planning stages for a new FM station. Because of the diversity of initial capital requirements experienced in the industry, detailed and explicit planning must be accomplished rather early in order to determine amounts and sources of capital funds to meet expenses for station construction, equipment purchase and installation, and furnishing. It is the differences in size of the station, amount and type of specialized broadcasting equipment, in addition to varied but extensive programming materials that can cause initial capital requirements to vary in their amounts. Therefore the need for early identification of what particular

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[4] Sherman P. Lawton, The Modern Broadcaster-The Station Book, (New York: Harper and Brothers, 1961), p. 106.

capital requirements will be and the identification of sources of this capital. Investors can plan for a fairly large capital outlay for property, assets, and programming materials necessary to begin station operations. Capital requirements, and their potential sources, must be given a high priority in preliminary planning actions to insure required amounts are available to meet initial expenses and cover initial operating costs.

Once the initial capital funds have been identified and allocated, planning consideration should then be directed to sources of recurring capital inputs. For the FM industry, such recurring capital inputs are generally small in comparison to initial requirements. Most often, additional capital requirements materialize when modification to equipment, expanded operations, or programming changes occur. Planning must include the identification of recurring capital sources to meet additional capital requirements.

The second area of economic factors essential to planning considerations for establishing and operating a new FM station is the determination and purchase of the proper asset combination necessary for the type station being planned. For the most part, the asset base required to conduct FM broadcasting operations is fairly standard. Almost all FM stations have similar equipment requirements to present their broadcasting services. Variations occur only when the station plans unique or specialized services.

The economic impact for planning asset requirements is simplified due to the basic asset structure of FM broadcasting stations being fairly standard. The initial capital outlay for purchase of these assets will be able to follow industry standards and guidelines. The

majority of the initial expenditure will be for property, structures, and equipment. This expenditure will be most variable in the property and buildings accounts and are influenced in the largest part by local economic conditions for these particular items. Expenditures for equipment, while likely to be large, will be based on industry demand rather than local economic conditions and their price therefore, less susceptible to large fluctuations. Wage and salary schedules are subjectively determined by station management and while second in station expenses, can be administratively controlled. The asset category which has the largest effect on economic functions of a FM station is the purchase, maintenance, and operation of technical specialized broadcasting equipment. This category requires close attention by management during planning actions. Overall, asset management and determination of asset requirements will likely involve a substantial investment of capital. Such an outlay will require the station management to provide close coordination of all efforts to sustain these assets in continuous and reliable operating condition so as not to require additional expense for service or replacement.

Economic factors which have an impact on the amount of success to be achieved in establishing and operating an FM broadcasting station must include a review of both individual station and industry trends for certain strategic areas. FM broadcasting operations have five key areas which provide indications of growth accomplishments and potential. It is these factors which have been responsible for, or a strong indication of, the successful growth record of the past few years and the basis for predicted increased growth in the future.

The five areas to be examined from the standpoint of growth patterns are: number of new FM stations, listening audience potential, FM set sales, advertising spot sales, and revenue of FM stations.

The growth in the number of new FM broadcasting stations is shown in Figures 2 and 3. The period of largest growth in number of new stations was from approximately 1964 to 1969. This growth can be attributed to actions by the FCC in 1964 and 1969. As pointed out in Chapter III, the FCC had become concerned with the prolification of AM stations. The rulings in 1964 and again in 1969 restricted the number of new AM applications and channeled interest and capital for the radio broadcasting industry into FM broadcasting. By 1969, FM growth in the number of new stations per year had begun to taper off to a fairly stable pattern of new entries. With continued improvement of FM broadcasting techniques, mediums (stereophonic and quadraphonic broadcasting), and quality, the growth pattern could average around a 4.20 percent increase in new FM broadcasting stations per year. This figure is derived using an arithmatic average of the percent growth for the years 1969 to 1972. This figure should represent a stable growth pattern as it includes a period after the initial influx of entries to the industry and has shown to be fairly stable for the period specified.

Figure 3 provides a percentage comparison of FM station growth since the 1969 FCC ruling to AM station growth for the period 1969 to 1972. While FM stations showed a 4.20 percent growth rate in this period, AM growth was only .75 percent during this time. With this growth record, and as a result of the FCC rulings, FM broadcasting will continue to receive the largest share of attention in the broadcasting

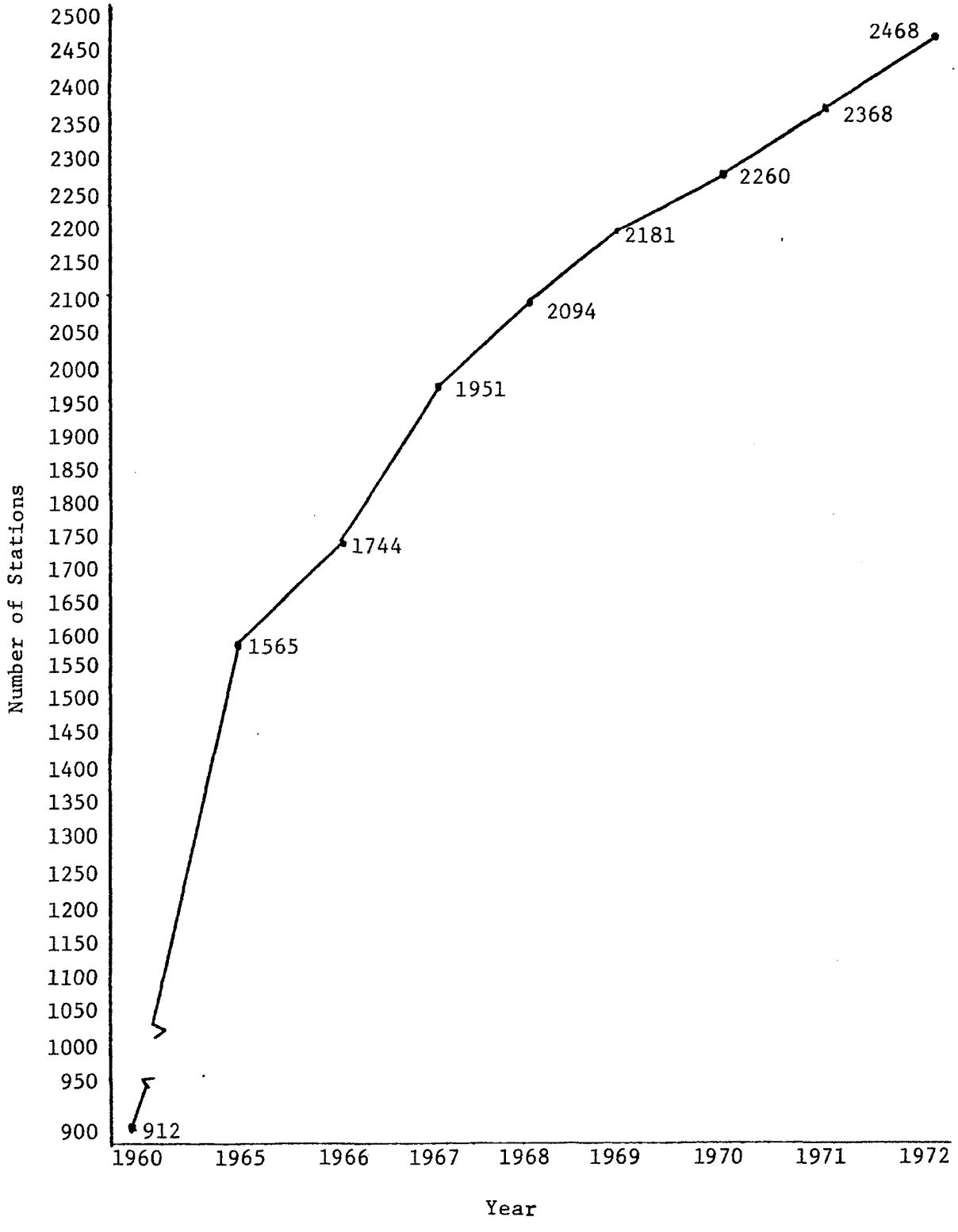

Fig. 2.--Growth in the number of FM stations.

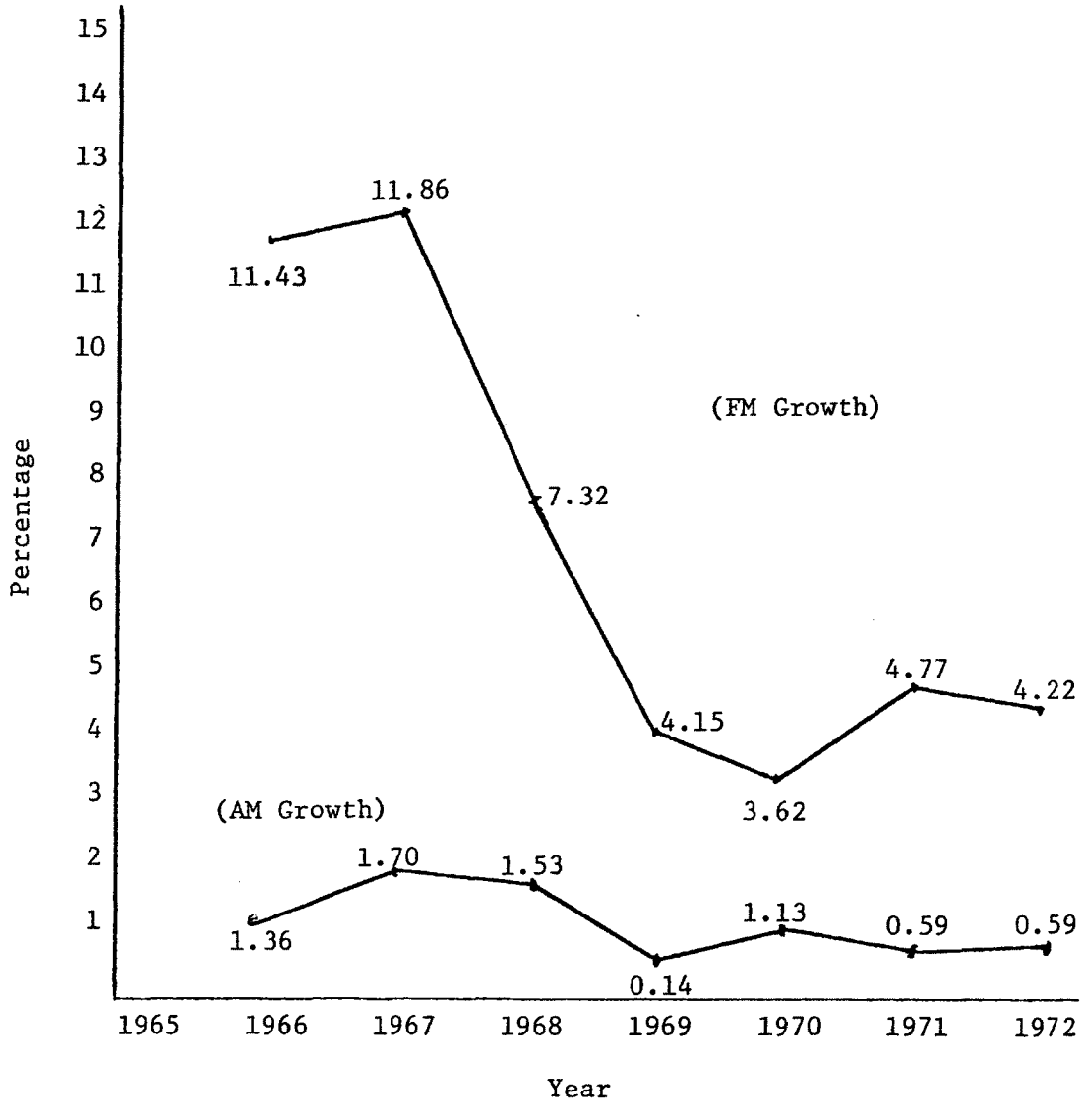

Fig. 3.--Percentage growth in number of FM stations as compared to percentage growth in number of AM stations, 1965 to 1972.

industry and shows the greatest potential for expanded growth in the future.

Another trend providing impetus to FM acceptance and growth has been the increased FM penetration (increases in FM listening patterns and number and type of listening audiences) in the recent past. Figure 4 presents the results of a Pulse survey of nine major market areas covering the period 1964 to 1969.[5] The survey reported an 82 percent weighted average increase in FM listening within the nine major market areas studied and concluded the percent increase was fairly representative of FM listening growth nationwide.[6] This particular trend has resulted in increased effectiveness in recruitment of FM advertising spot sales and has been in part responsible for increased revenue for FM stations. Another survey providing emphasis to the steadily increasing acceptance of FM broadcasting was a Pulse survey on the demographic profile of FM listeners based upon income levels and educational background.[7] The results of this survey are shown in Figure 5. The survey concluded that FM, compared to AM, has audiences upscale in terms of income with a more pronounced skew toward better educated listeners.[8]

Consumer interest in FM can be traced to the increased retail sales of FM radio and receiver sets. Figure 6 presents a two part

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[5] Alfred J. Jaffe, "Ted Bates Study Finds Impressive FM Growth," Television/Radio Age, March, 1971.

[6] Ibid.

[7] Ibid.

[8] Ibid.

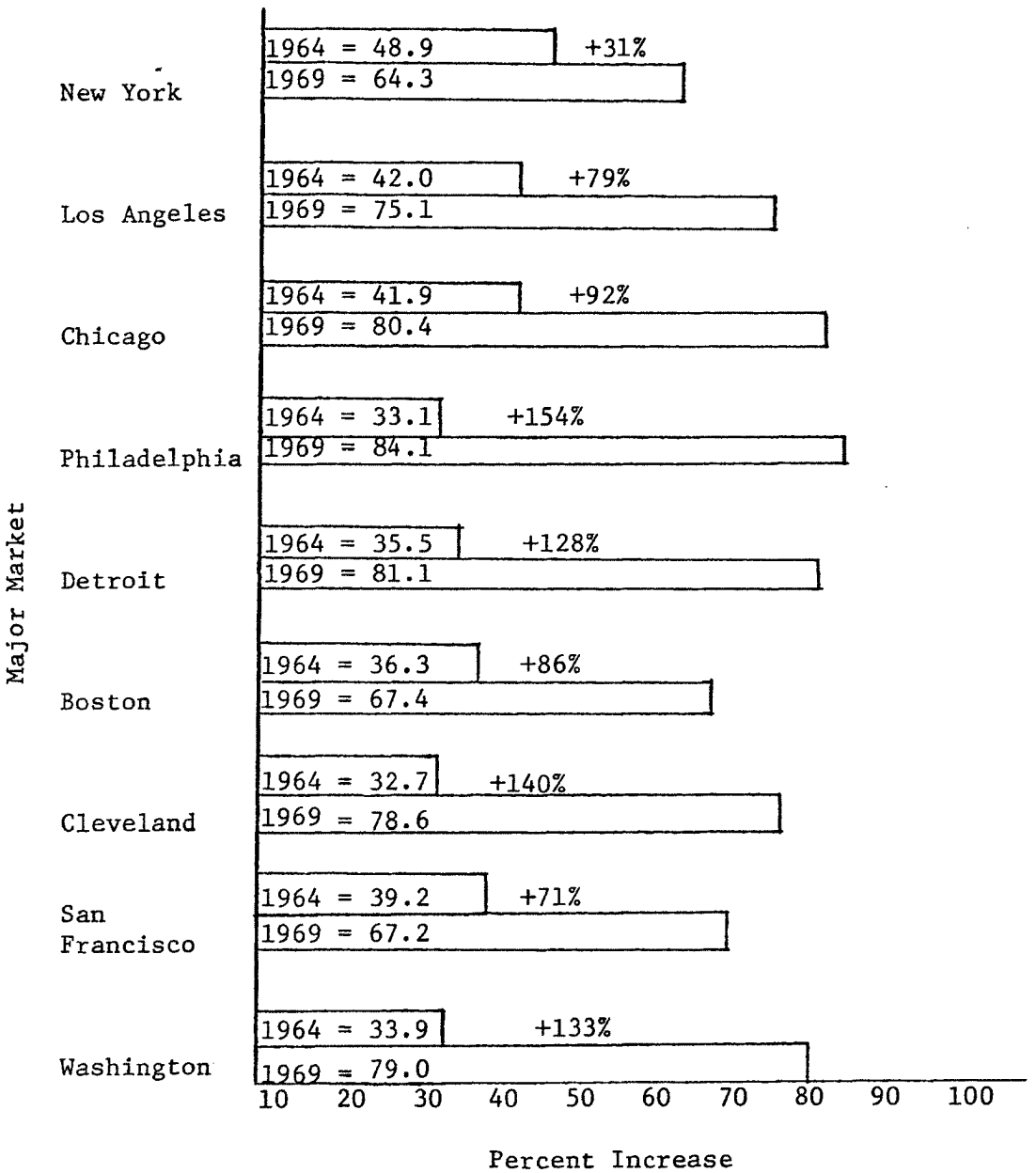

Fig. 4.--FM set penetration 1964 - 1969 (Nine Major Market Survey - Pulse).

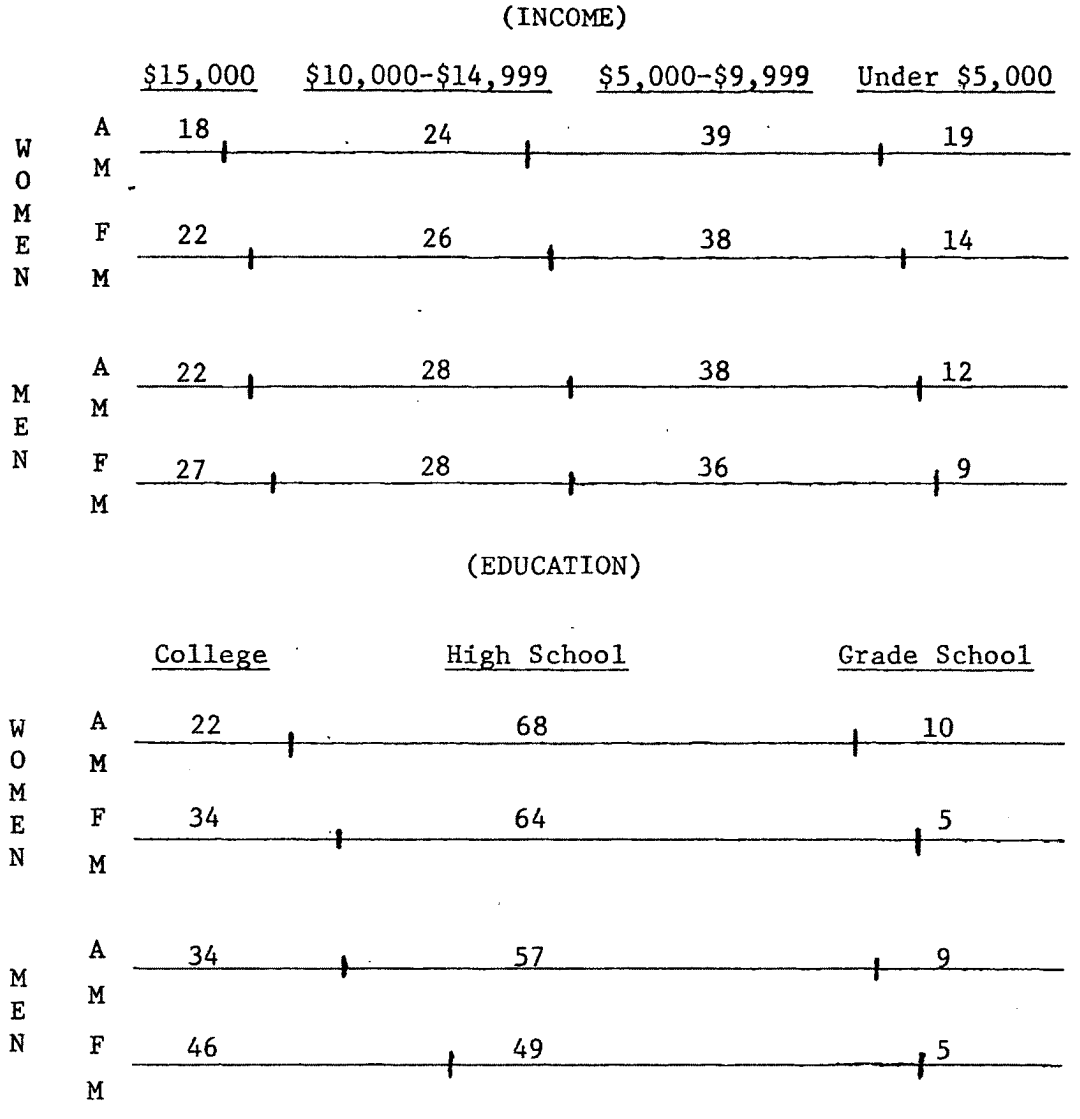

Fig. 5.--FM Demographic Profile, (Income and Education)

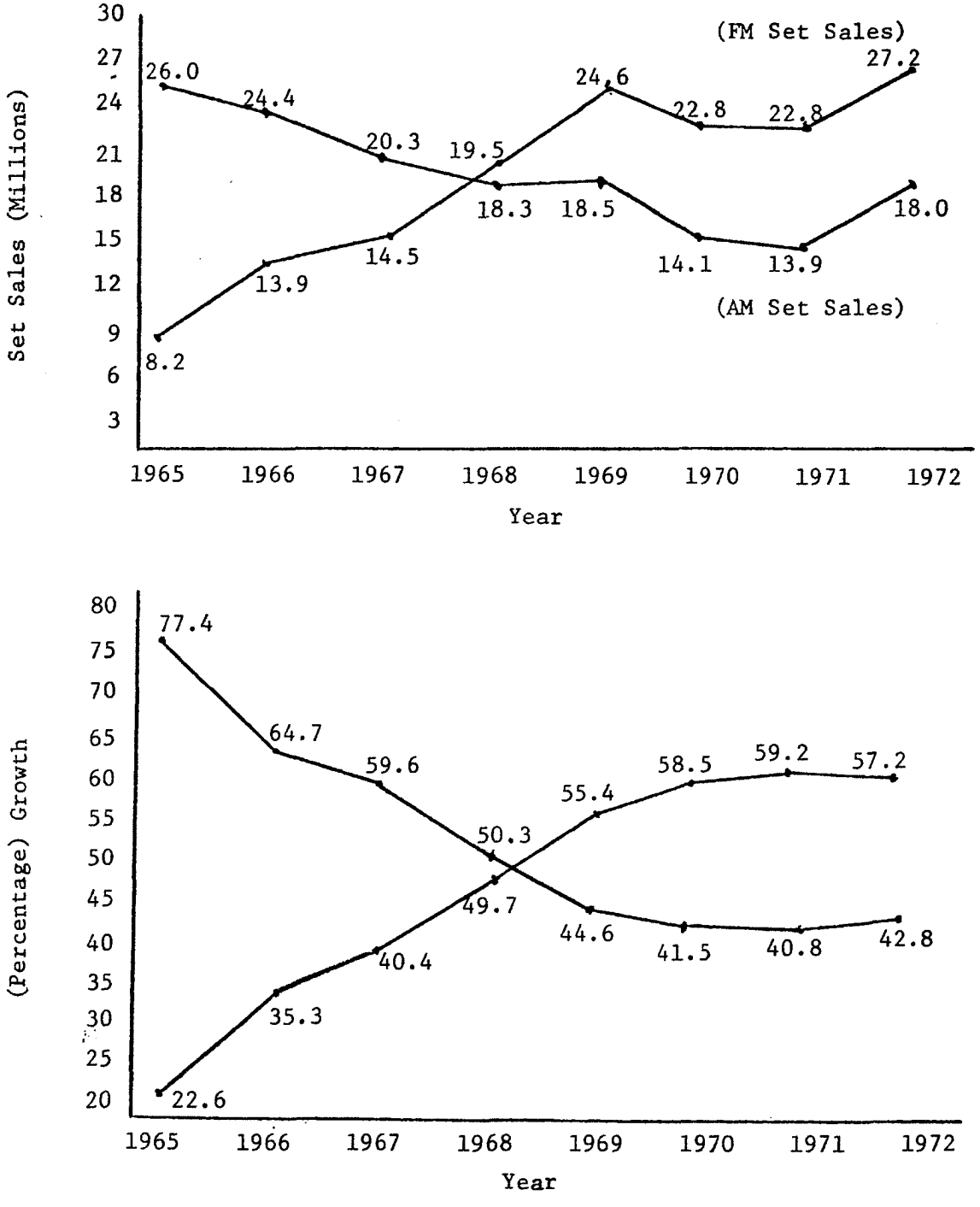

Fig. 6.--FM Radio set sales as compared to AM radio set sales and percentage growth FM set sales as compared to percentage growth AM set sales.

comparison of FM set sales and AM set sales.[9] Both in total numbers and percent increase in set sales the FM category has surpassed AM in each year since 1968. This particular trend provides a readily apparent indication of consumer desires and dramatically points toward an increased preference for FM.

The final two trend patterns to be reviewed include FM revenue and FM advertising spot sales. As the majority of FM revenue received from advertising spot sales the two areas are generally considered concurrently by industry officials. Figure 7 shows the growth in FM revenue from 1965 to an estimated 1973 value.[10] The figure shows the continued increase pattern FM revenue has established. To more clearly illustrate FM revenue growth for this time period, Figure 8 shows the percentage growth of FM compared to percentage growth of AM revenue for the same period.[11] This revenue growth should continue to average between 20 percent and 30 percent over the next five years as the FM industry continues to effectively orient its programming efforts to consumer preferences and advertising spot sales continue to increase.

The combined statistics of station growth, FM set sales, FM penetration, and FM advertising spot sales provide indications of the acceptance of FM broadcasting in the most recent past and give rise to forecasted growth in the immediate future. These factors have all been excellent references for the success being enjoyed in the FM broadcasting industry and give impetus to increased growth potential.

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[9] National Association of Broadcasters, Dimensions of Radio, (Washington, D.C.: National Association of Broadcasters, 1974), pp. 22-23.

[10] National Association of FM Broadcasters, 1973 Radio Financial Report, (New York, 1974).

[11] Ibid.

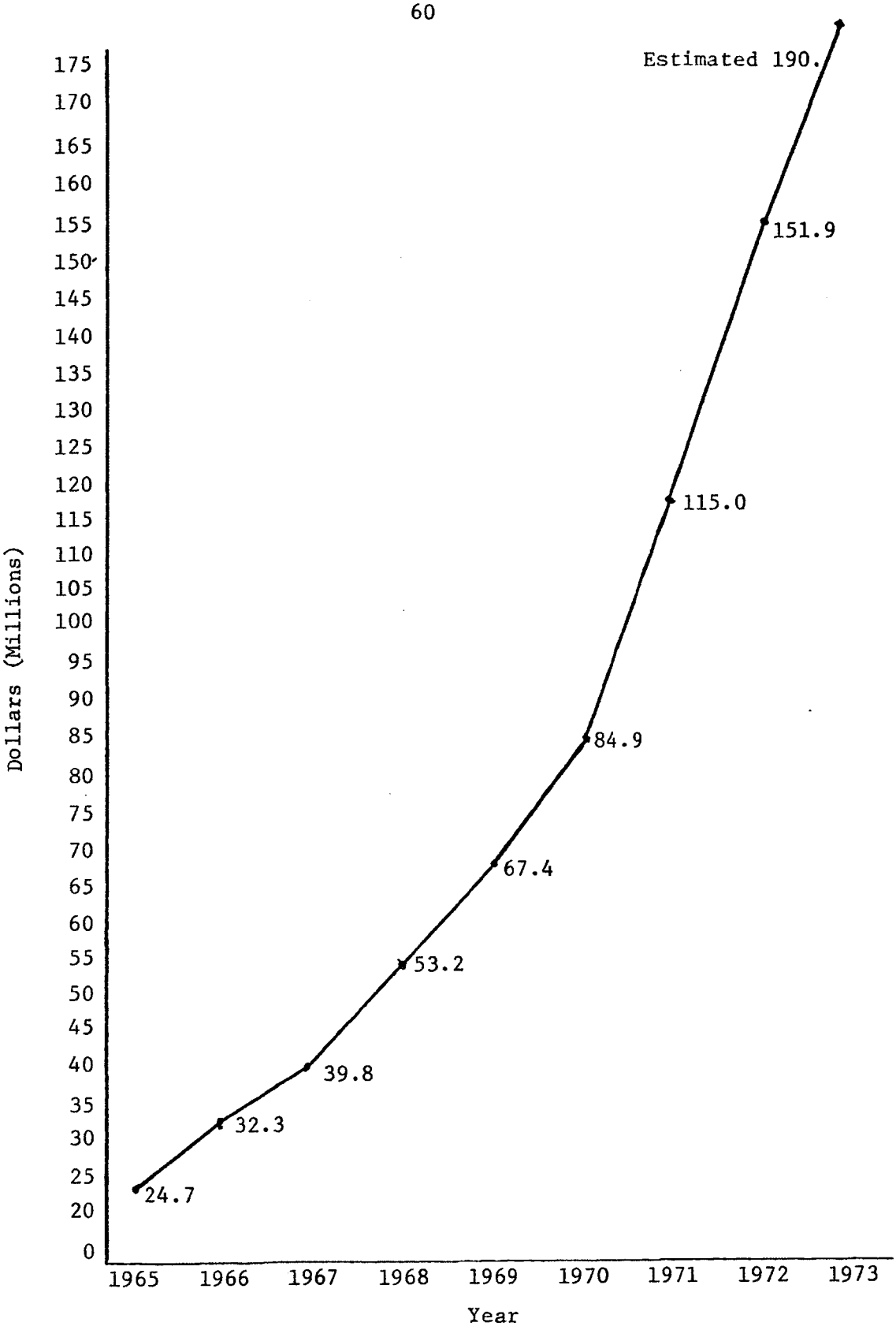

Fig. 7.--FM Revenue 1965 - 1973.

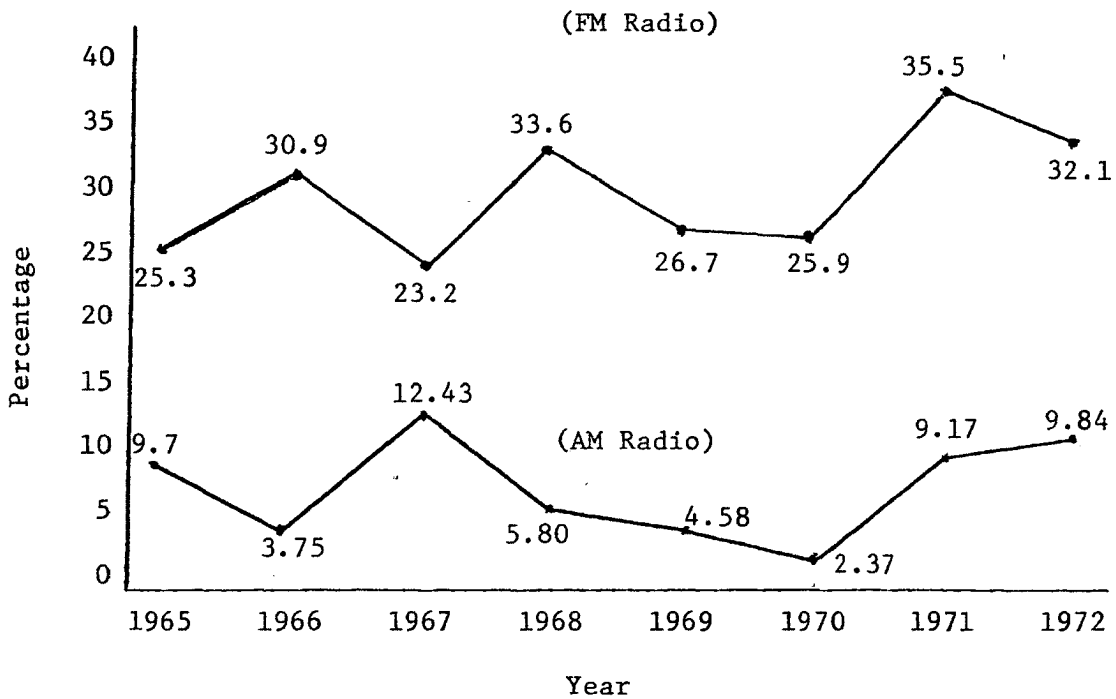

Fig. 8.--Percentage increase of FM revenue as compared to percentage increase of AM revenue.

Investor Outline

Managerial factors essential to basic planning functions must include establishing the most typical organizational structure from which to build station operations and conducting extensive investigation on the correct programming format and operations policies for advertising spot sales programs. Economic factors can vary widely and are dependent upon several key items. In each case, the potential investor must conduct extensive research, study, and analysis of each area to determine if the new FM station will be of value to the owners and the community.

There are certain minimum tasks that investors must consider during preliminary planning actions. These tasks are presented below in outline form. The outline is structured to present the tasks in an order such that they can be used in a building block manner as information is received.

OUTLINE OF ESSENTIAL TASKS TO BE ACCOMPLISHED IN PLANNING THE ESTABLISHMENT AND OPERATION OF A COMMERCIAL FM BROADCASTING STATION

I. EVALUATE ENGINEERING AND TECHNICAL REQUIREMENTS

- A. Is there a frequency in the area?
- B. Do current community zoning regulations allow for the construction of a commercial broadcasting facility?
- C. What class station (Class A, B, or C) should be built to provide the best service possible in the community?
- D. What power wattage and antenna height is required to provide the best coverage to the community?
- E. What power wattage and antenna height should be used to preclude interference to and from other broadcasting stations?

F. Are there sources within the community for purchase and service of specialized broadcasting equipment?

G. Are technicians and broadcasting specialists available in the area?

H. Are there adequate realty sites available in the community for the construction or purchase of station facilities?

I. Are there adequate realty sites available in the community for the location and construction of transmitting facilities?

II. EVALUATE THE COMMUNITY

A. What are the current forms of commercial broadcasting mediums in the community?

B. Are there any competing FM stations in the immediate community?

C. What are the programming formats of the existing commercial broadcasting FM stations?

D. Has a survey been made of community preferences for commercial broadcasting programming formats?

E. Has there been a survey conducted to determine the number of FM receivers in the community?

F. Do retail sales show a large number of the population purchase FM receivers or radios with an FM receive capability?

G. Would the community support a new commercial FM station with a new format?

H. What is the demographic profile of the community?

I. Does the demographic profile show a necessity for a specialized programming format?

J. Do census figures show the community size increasing or decreasing?

K. Does the majority of the population reside in urban or rural localities?

L. Is there a sufficient supply of qualified labor in the area?

M. Is the labor force expanding or contracting?

III. EVALUATE ECONOMIC REQUIREMENTS

A. What is the average per capita income of the community?

B. Has the average per capita income shown a steady growth pattern?

C. What are the average total retail sales for the area?

D. Have average total retail sales figures shown a trend upward in the recent years?

E. Do average retail sales show a steady spending pattern for the area?

F. Do average retail sales figure for the area allow for effective advertising programs?

G. Are the number of businesses in the area expanding or decreasing?

H. Are the area businesses concentrated in urban or rural localities?

I. Are there sufficient businesses in the area for a viable, competitive advertising program?

J. Do area businesses conduct extensive advertising campaigns?

K. Do area businesses support commercial broadcasting mediums with advertising spot sales?

L. Are there sufficient sources of large volumes of capital funds in the area?

M. Are sources of capital funds increasing or decreasing?

N. Do community economic indicators show an expanding basis for commercial business enterprises?

O. Are there any organized community projects for sponsorship of new commercial enterprises?

The outline steps above are by no means inclusive of all factors which must be considered during preliminary planning stages for a new commercial FM broadcasting station. However, the steps provided will enable the investor to obtain a sufficient basis of information upon

which he can determine if adequate support for the new station is available in the community. After review and analysis of the information gathered in accordance with this outline, the investor will have a more positive idea of the potential for success of the new station and his investment.

Summary

FM broadcasting has demonstrated a steady growth since 1960. Some media businessmen have forecast FM growth to have nearly reached parity with AM even though it has a fewer number of stations and is comparatively new to the broadcasting industry. Studies have shown that audience listening habits are becoming increasingly attracted to FM. As audience listening levels are up the advertising spot sales for FM are gaining ground. Revenue for FM continues to rise nationwide. The FM broadcasting industry has taken steps to improve the quality and type of programming formats in response to consumer preference surveys. These items have been substantiated by leading media analysis firms and have contributed to a prediction of further growth in popularity, revenue, and overall success of FM broadcasting.

Mr. Ted Bates, a media analyst, in an article on FM growth for Television/Radio Age magazine concluded his research with the following statement on FM growth potential:

> FM still tends to be attractive to consumers. Along with its increasing audience, penetration and revenue, FM is making a strong factor in the advertising business. FM acceptance has not been revolutionary. Rather, its new success has been evolutionary--a slow starter, but one medium to watch.[12]

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[12] Jaffe, Television/Radio Age.

CHAPTER VI

CONCLUSION

In the past ten years, the FM broadcasting industry has experienced a rapid growth in the number of stations licensed by the FCC, revenue, public awareness and support. This growth has in turn created an increased interest among entrepreneurs in the establishment and operation of a commercial FM broadcasting station as an investment project. This increased interest was somewhat hampered by the lack of current and relevant information concerning commercial FM station operations and management. The objective of this paper has been to gather information concerning the principle economic and managerial factors which must be reviewed and evaluated before making a decision to invest capital in a new FM station. This paper thereby provides a single source of information the interested investor may review and use as a reference when gathering specific data on his investment decision.

There are five key areas which must be reviewed and carefully considered when establishing a new FM station. These five key areas are:

a. Organizational Structure

b. Asset Structure

c. Personnel Management

d. Programming Format

e. Financial Management and Control.

In the areas of organizational structure, asset structure and personnel management, the potential investor's review and evaluation actions have been somewhat simplified by the relatively standard nature of these areas in the FM broadcasting industry. FM stations are typically organized around planned programming formats. The asset structure in most stations is common to the type and mode of broadcasting services required. Personnel and staff management is closely aligned to the standard organizational structure. In each case, these functions are basic and common to each station and do not vary in position or function. The investor can confidently follow the industry standard in these areas in planning for a new station.

In the areas of programming format and financial management and control the investor must conduct extensive research and investigation of both community and industry indicators which influence these factors. The programming format represents the station's "product" in the local market. As such, careful review and consideration of community preferences, industry studies and surveys, should be accomplished to allow the "product" to become identifiable, acceptable, and supported by the community's listening public and businesses. If the programming format is accepted and supported by the community, then local businesses can identify the new station as a medium for commercial advertisements. With commercial advertisements being the primary source of revenue for an FM station, this identification by local businesses is not only essential, but paramount, to successful operations.

The five principle economic and managerial factors identified in the preceding paragraphs allow the interested investor to align required planning operations for a new FM station. To further assist

the investor, an outline of essential preliminary investigative actions is presented in Chapter V. This outline provides specific alternatives and actions the investor must consider before committing large amounts of capital to the project. The outline will provide information which the investor can use to align and evaluate the potential of the station to both the community and owners. The outline must be used as a general guidance and management tool rather than as a specific model. Specific data influencing cost factors will be dependent upon the planned scale of operations, type of station facilities and services to be presented, national and local economic conditions. Its purpose is to gather pertinent information which can be assimilated and placed in an orderly manner for a more confident data base on the overall potential of a new FM station in a particular community. When followed in this manner the investor will be able to observe the interrelationship of all essential factors bearing upon his investment decision.

The rapid growth rate of the FM broadcasting industry and its associated demonstrated potential for continued successful growth has been, and will continue to be, a viable investment opportunity. To the interested investor, this paper will provide a not previously available single source of background information and recommended procedures which will allow for an individual, comprehensive evaluation of the essential factors for such an investment opportunity.

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